



PAPERLESS ACQUISITION FOR THE NEW MILLENNIUM: TOWARDS A UNIFIED ARMY CITIS APPROACH

*Presented to
CONOPS for CIDS Workshop
8 September 1999*

by

*Edward Dlugosz, Technical Director,
System Resources Corporation*

Subsidiary of Titan Corporation

Contractor Integrated Technical Information Services (CITIS)

OUTLINE

★ PAPERLESS ACQUISITION

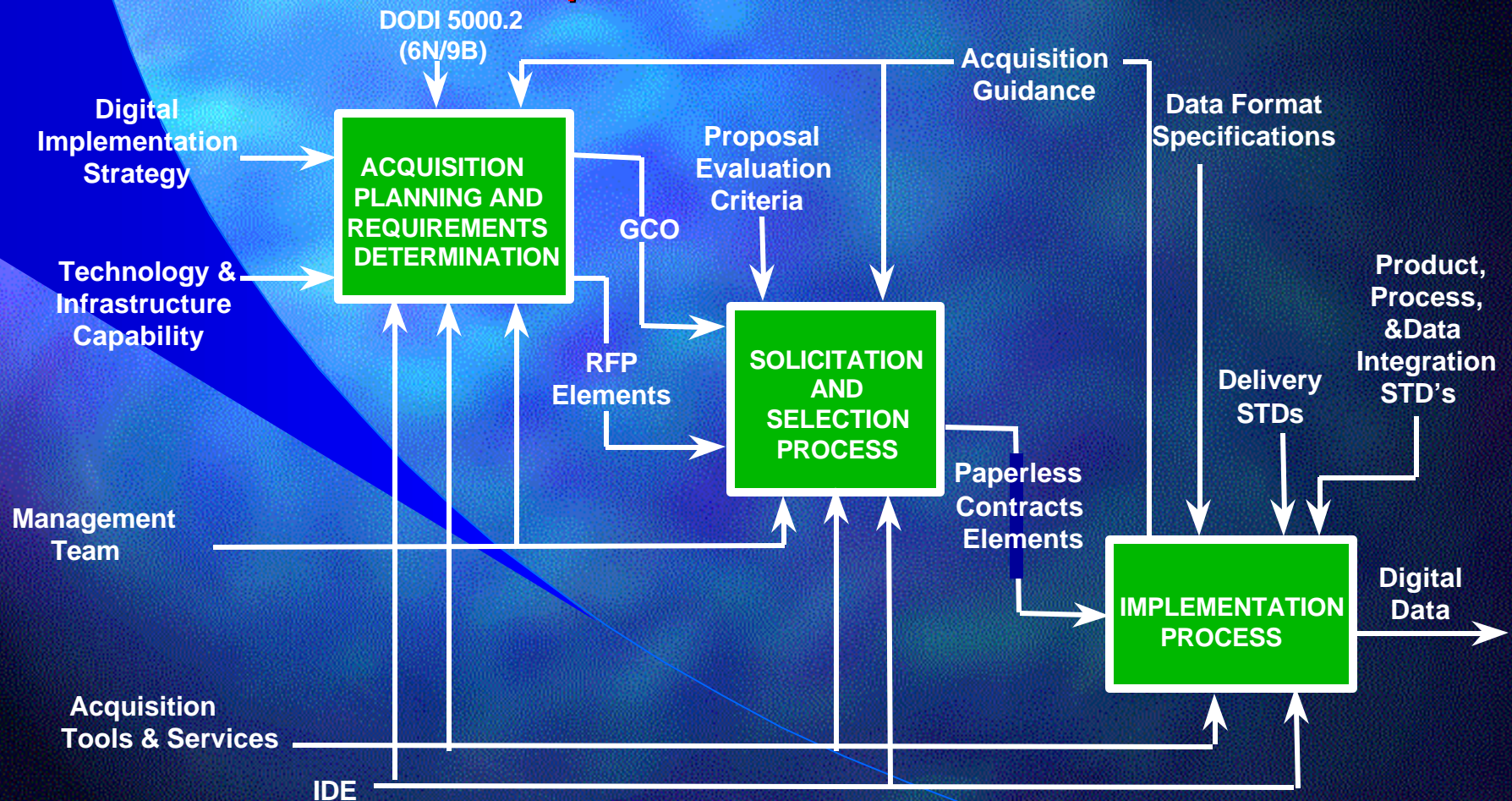
- ★ Acquisition planning and requirements determination.*
- ★ Solicitation and source selection process.*
- ★ Implementation processes.*

★ CITIS STRATEGIES

★ LESSONS LEARNED

★ SUMMARY

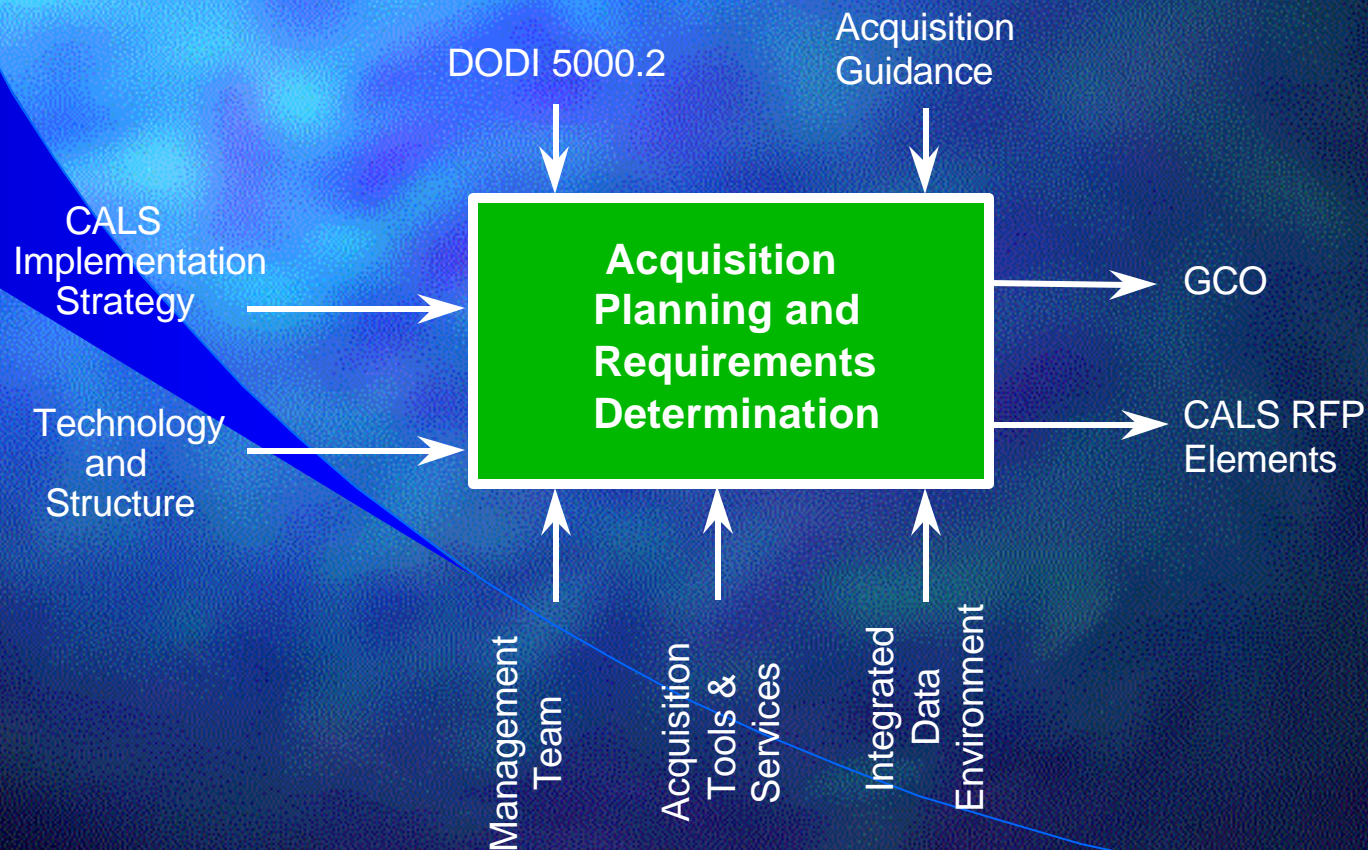
Acquisition Process



Acquisition of Defense System Data in CALS Format Is Part of the of the Total Acquisition Process

PAPERLESS ACQUISITION

Acquisition Planning and Requirements Determination



PAPERLESS ACQUISITION

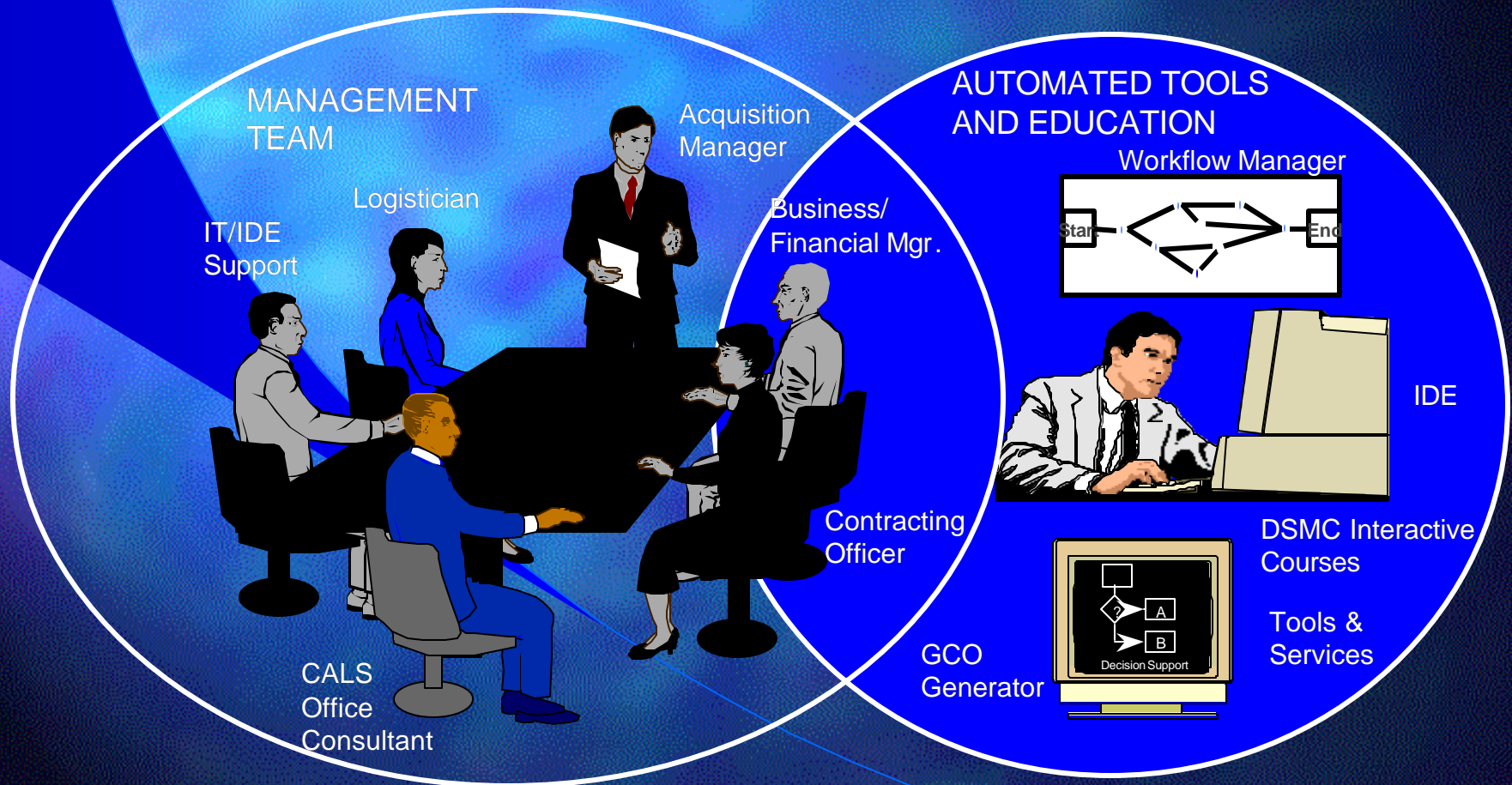
Acquisition Planning and Requirements Determination

Acquisition Guidance:

- ★ *Defense Acquisition Deskbook (D.A.D.)*
- ★ *Joint Services CALS Reference Toolkit*
- ★ *PM's Desktop Guide for CALS Implementation*
- ★ *MIL-STD-974 (CITIS)*
- ★ *Service and Site-Specific Guidance*
 - ★ *Directives and Implementation Plans*
 - ★ *Tools and Services*

PAPERLESS ACQUISITION

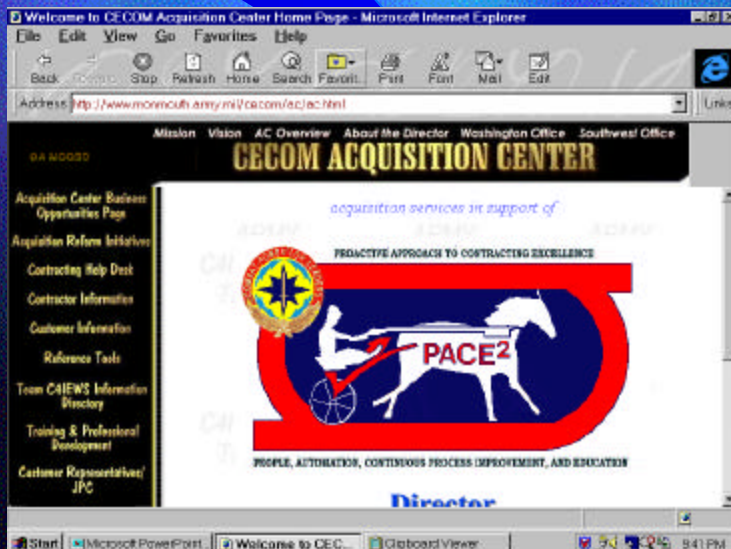
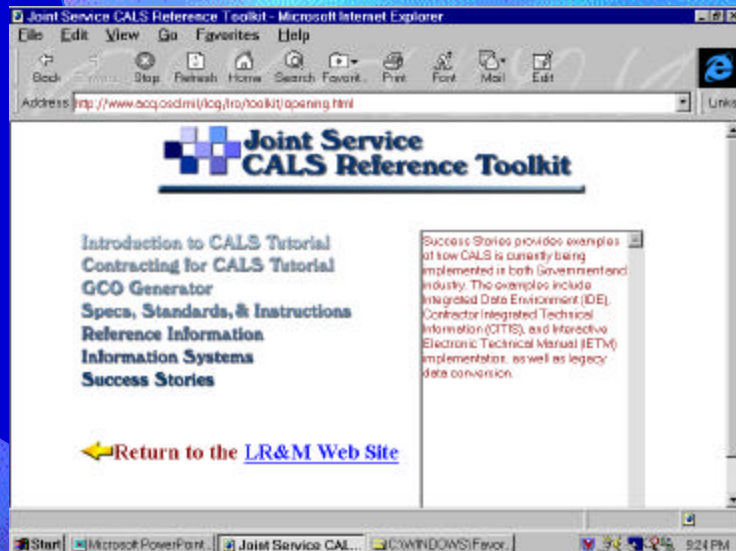
Acquisition Planning Support Mechanisms



INTEGRATED PRODUCT & PROCESS DEVELOPMENT (IPPD) TEAMING

PAPERLESS ACQUISITION

Acquisition Tools and Services



PAPERLESS ACQUISITION

Selected References URLs:

- ★ *Defense Acquisition Deskbook*
<http://www.deskbook.osd.mil>
- ★ *Joint Services CALS Reference Toolkit*
 - ★ *GCO Generator*
 - ★ *Contracting for CALS Tutorial (DSMC)*
<http://www.acq.osd.mil/log/lro/toolkit/>
- ★ *CECOM Acquisition Center*
 - ★ *<http://www.monmouth.army.mil/cecom/ac/ac.html>*
- ★ *CECOM Business Opportunity Page*
 - ★ *[Http://www.monmouth.army.mil/cecom/ac/ac.html](http://www.monmouth.army.mil/cecom/ac/ac.html)*
- ★ *Electronic Commerce Resource Center*
[http:// www.ecrc.ctc.com](http://www.ecrc.ctc.com)

PAPERLESS ACQUISITION

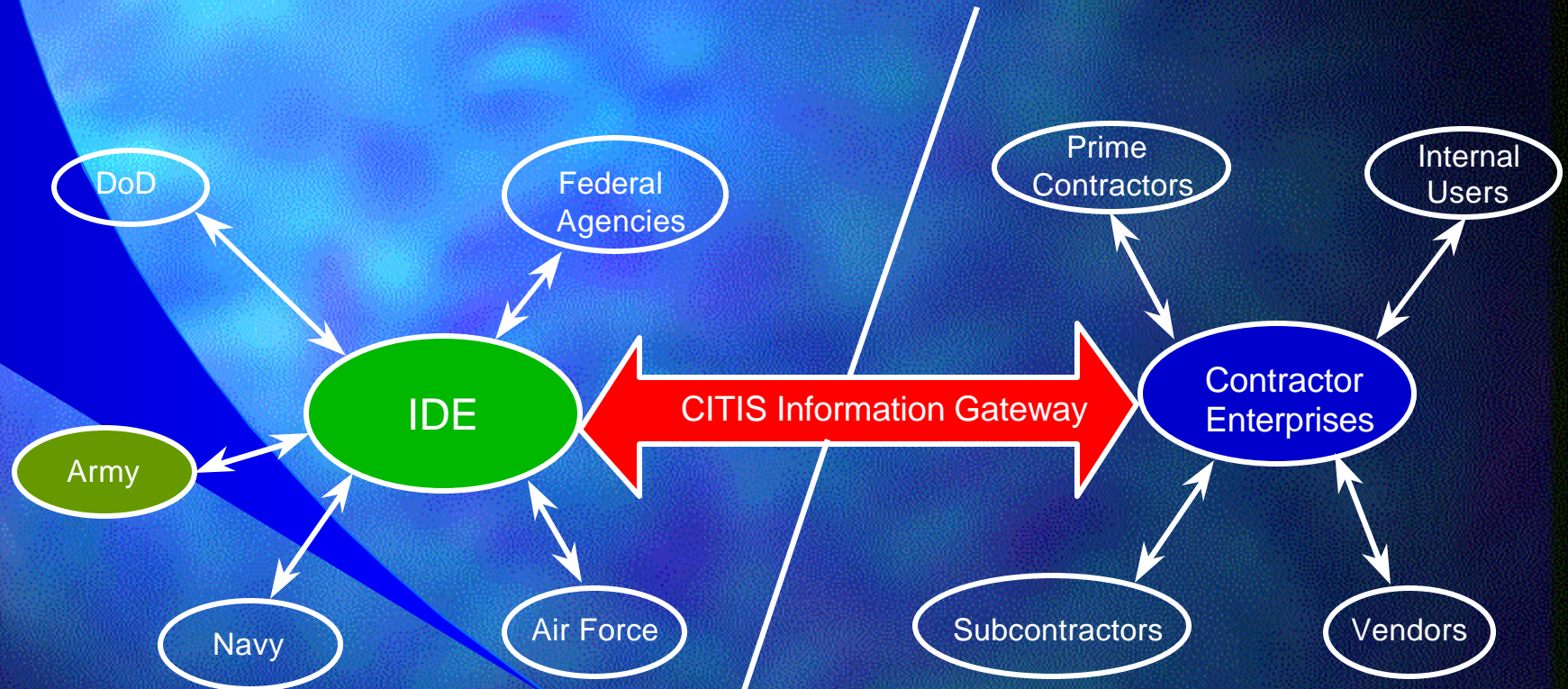
Government Concept of Operations (GCO)

Assists Acquisition Manager in determining:

- ★ Data users, data types, frequency of use, and timeliness of data access delivery.*
- ★ Data use and review/approval processes to support life cycle functions.*
- ★ Users' locations and primary functions in support of the defense system.*
- ★ Data interchange requirements (format, media, standards, and telecommunications).*
- ★ Security, access authorizations, and restrictions; data rights, data stewardship, and data ownership.*
- ★ Hardware and software systems to manage and use the data [IDE/CITIS].*

CITIS

Integral Part of the Integrated Data Environment (IDE)



CITIS Provides the
Electronic Conduit Between
Contractor Enterprises and
the Government

PAPERLESS ACQUISITION

GCO Process

IDENTIFY

1. IDENTIFY
WHAT TYPES
OF DATA ARE
REQUIRED

2. IDENTIFY
WHO WILL
USE THE DATA

3. IDENTIFY
HOW THE USER
WILL USE
THE DATA

4. IDENTIFY
THE USERS'
INFRASTRUC-
TURE

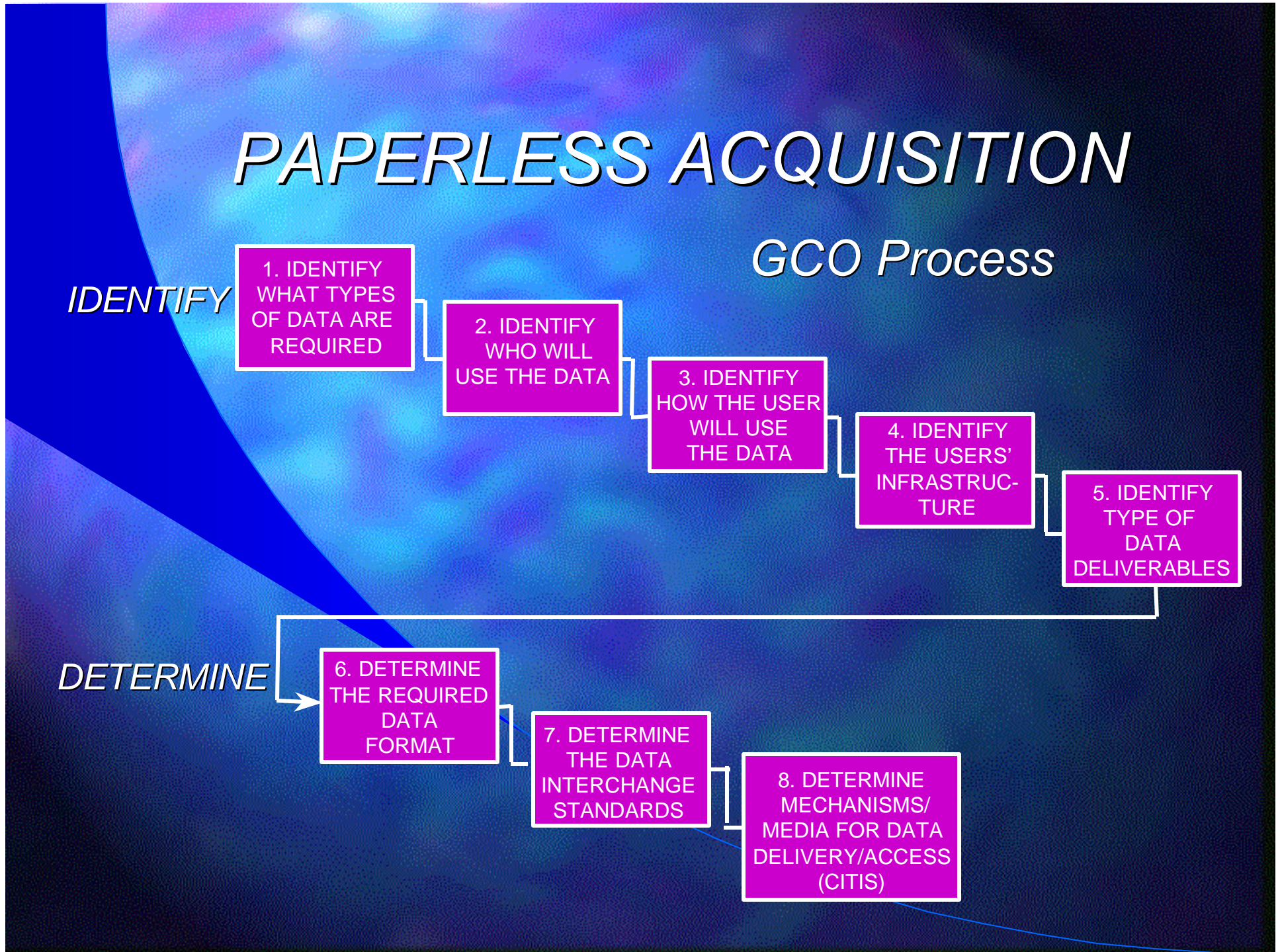
5. IDENTIFY
TYPE OF
DATA
DELIVERABLES

DETERMINE

6. DETERMINE
THE REQUIRED
DATA
FORMAT

7. DETERMINE
THE DATA
INTERCHANGE
STANDARDS

8. DETERMINE
MECHANISMS/
MEDIA FOR DATA
DELIVERY/ACCESS
(CITIS)

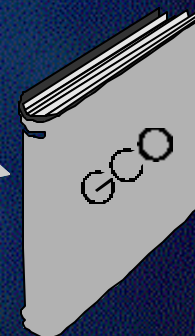


PAPERLESS ACQUISITION

Manual GCO Generation

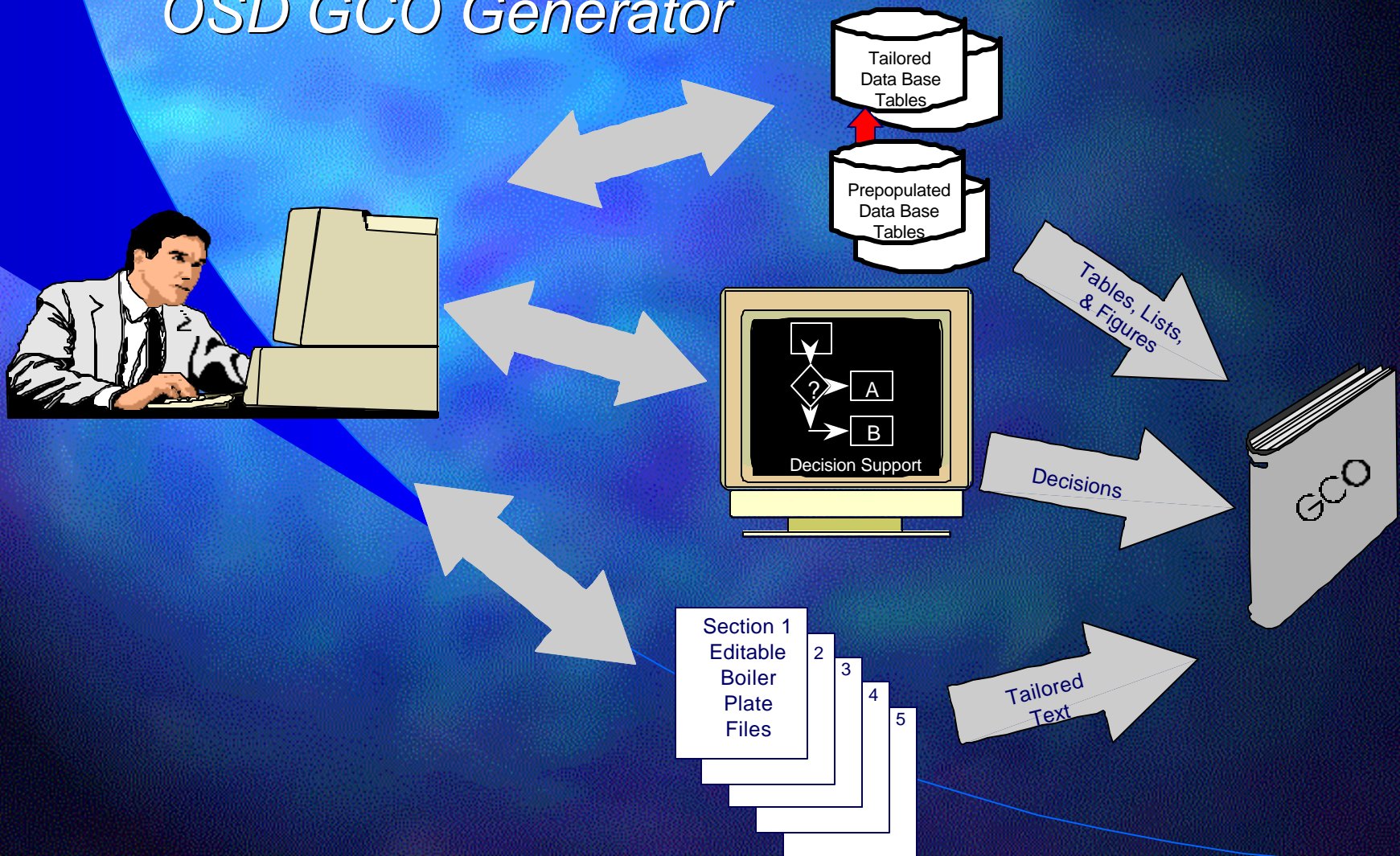


Manual Preparation



PAPERLESS ACQUISITION

OSD GCO Generator

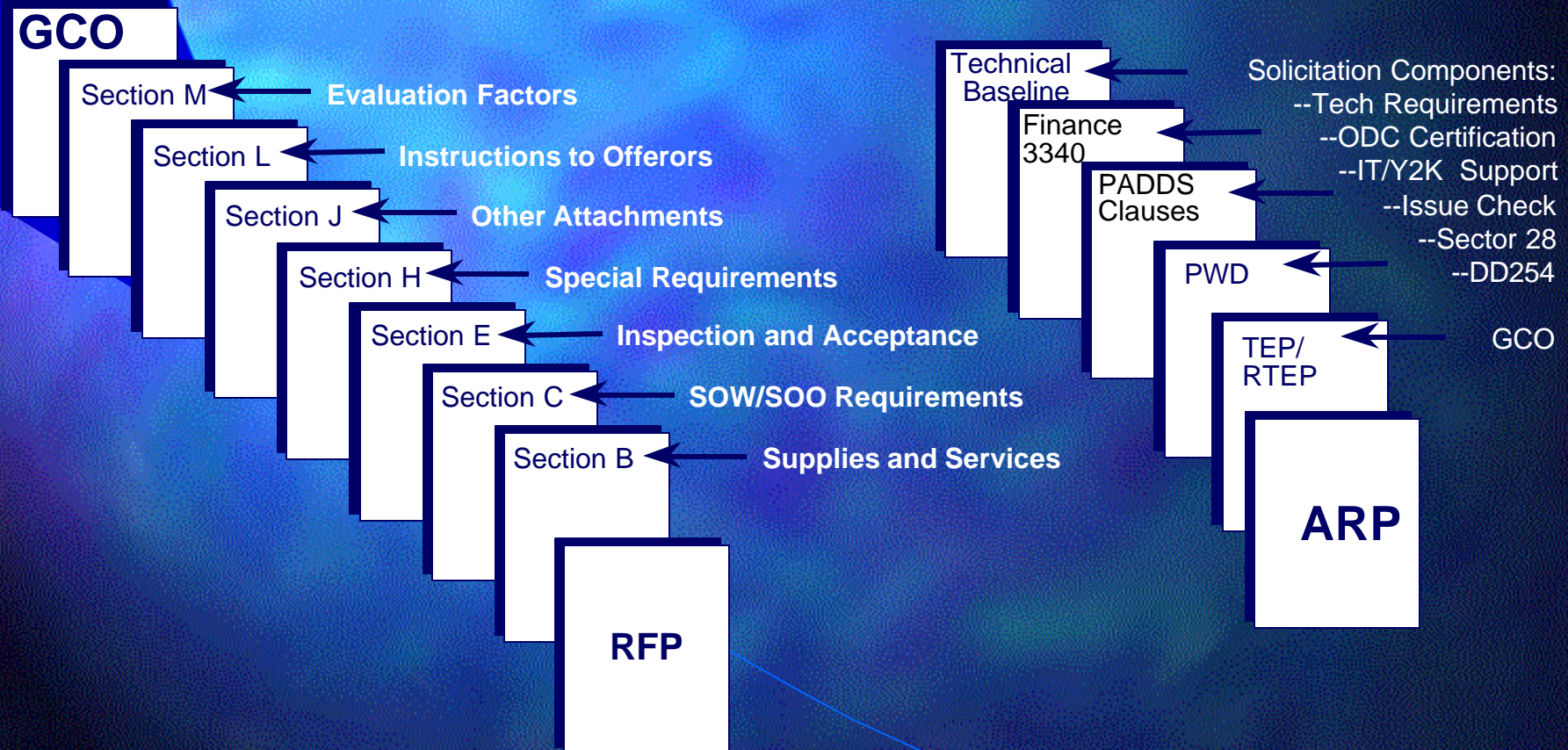


PAPERLESS ACQUISITION

CALS Language in an RFP or an ARP

New Acquisition

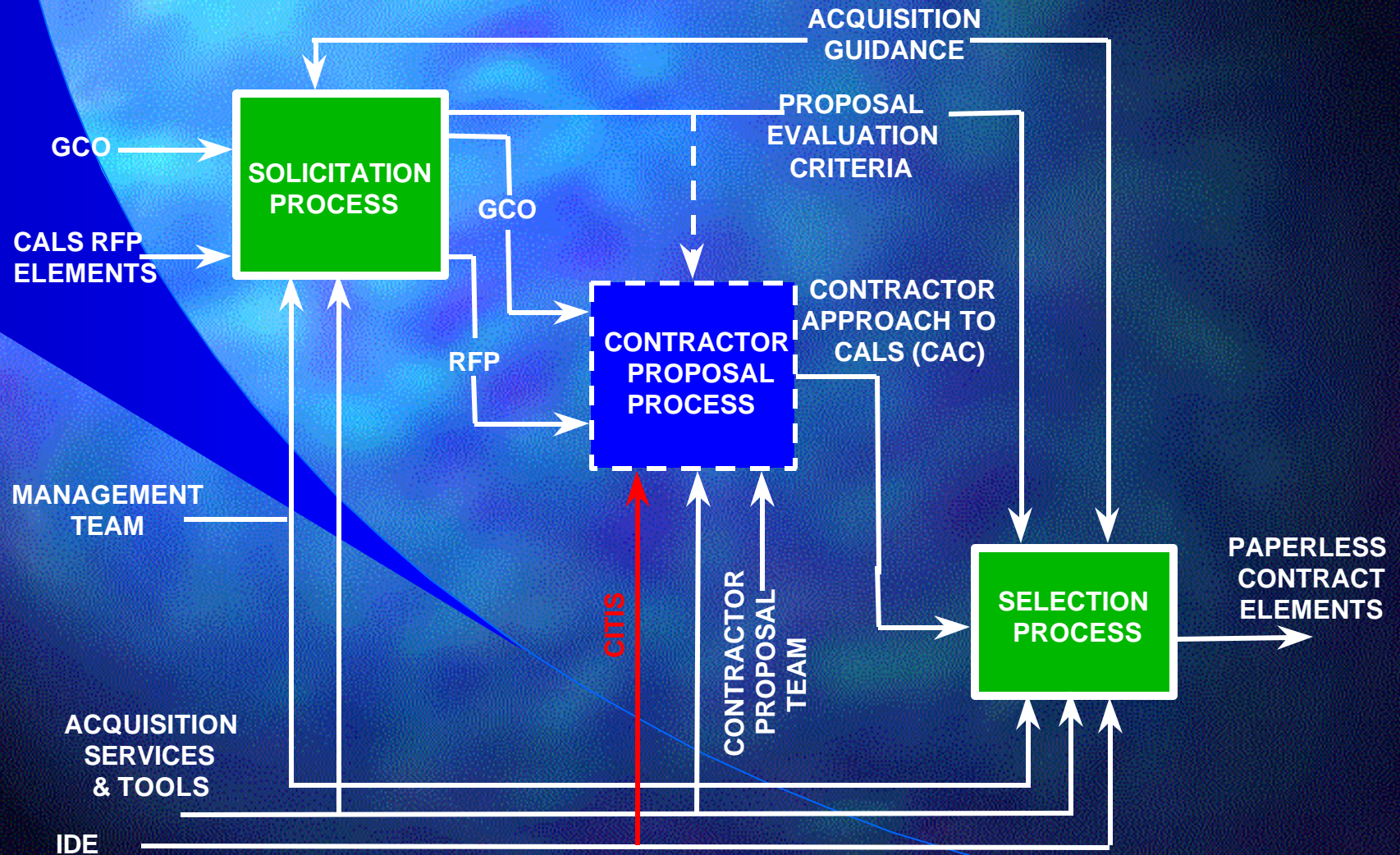
Spares Reprocurement



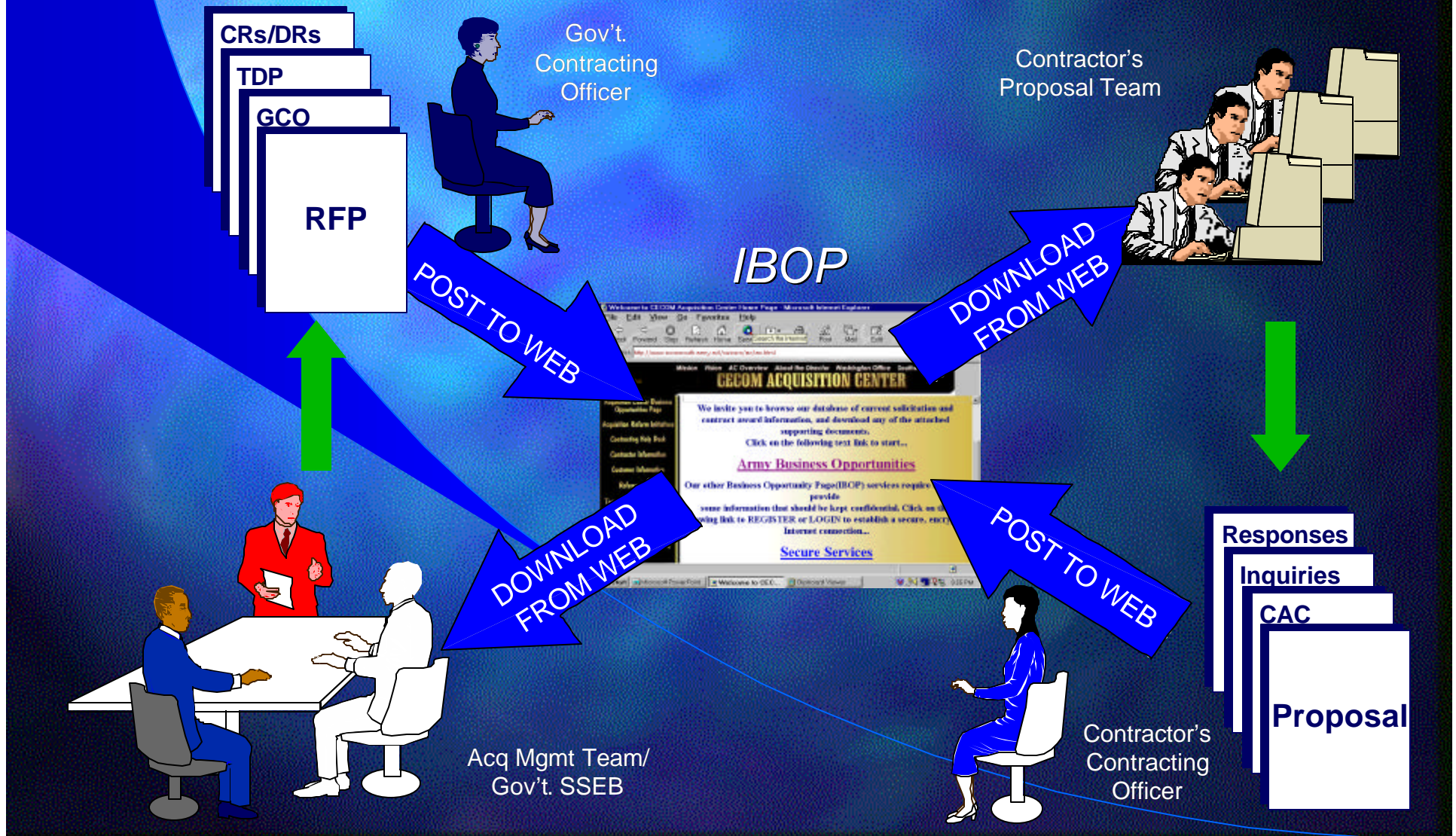
U.S. Army CALS Implementation Plan, Contracting for CALS Tutorial (DSMC), and MIL-HDBK-59B Provides Guidance and Sample Language

PAPERLESS ACQUISITION

Solicitation and Selection Process



PAPERLESS ACQUISITION



CITIS

Contractor's Approach to CALS (CAC)*

CAC should respond to the GCO/SOW and include:

- ★ Contractor's approach and experiences in regard to digital information.*
- ★ Formal procedures for integrating applications and data bases.*
- ★ Contractor's approach to CITIS.*
- ★ Statement of the plan's purpose and scope.*
- ★ CALS program management.*
- ★ CITIS system test and evaluation.*
- ★ Information system description.*
- ★ Data protection and integrity.*

**CAC has had many names: Contractors IDE/Implementation Concept, CALSIP, SPI etc., but they all essentially mean the same.*

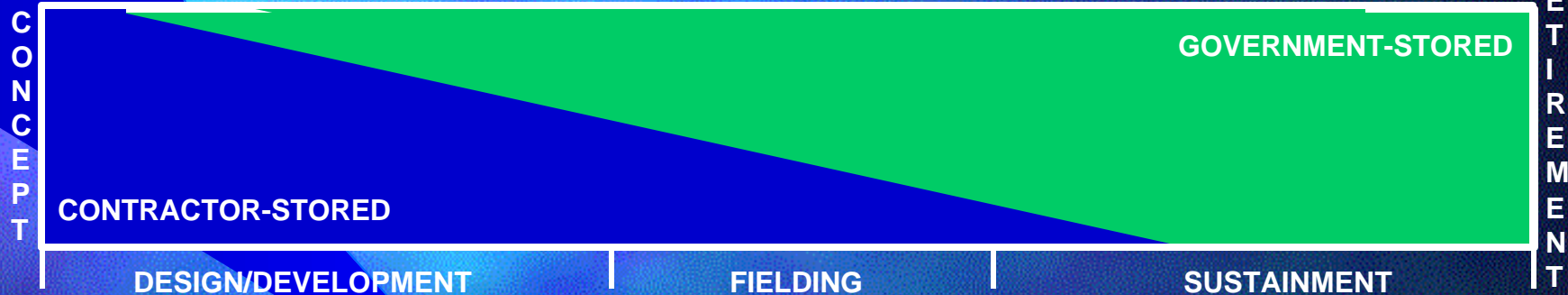
CITIS

CITIS Planning & Evaluation Considerations

★ *Phase of Acquisition Life Cycle*

★ *Initial Procurement*

★ *Reprocurement of Spares/Items/System*



★ *Maintenance/Sustainment Strategy*

★ *Criticality of Visibility/Schedule*

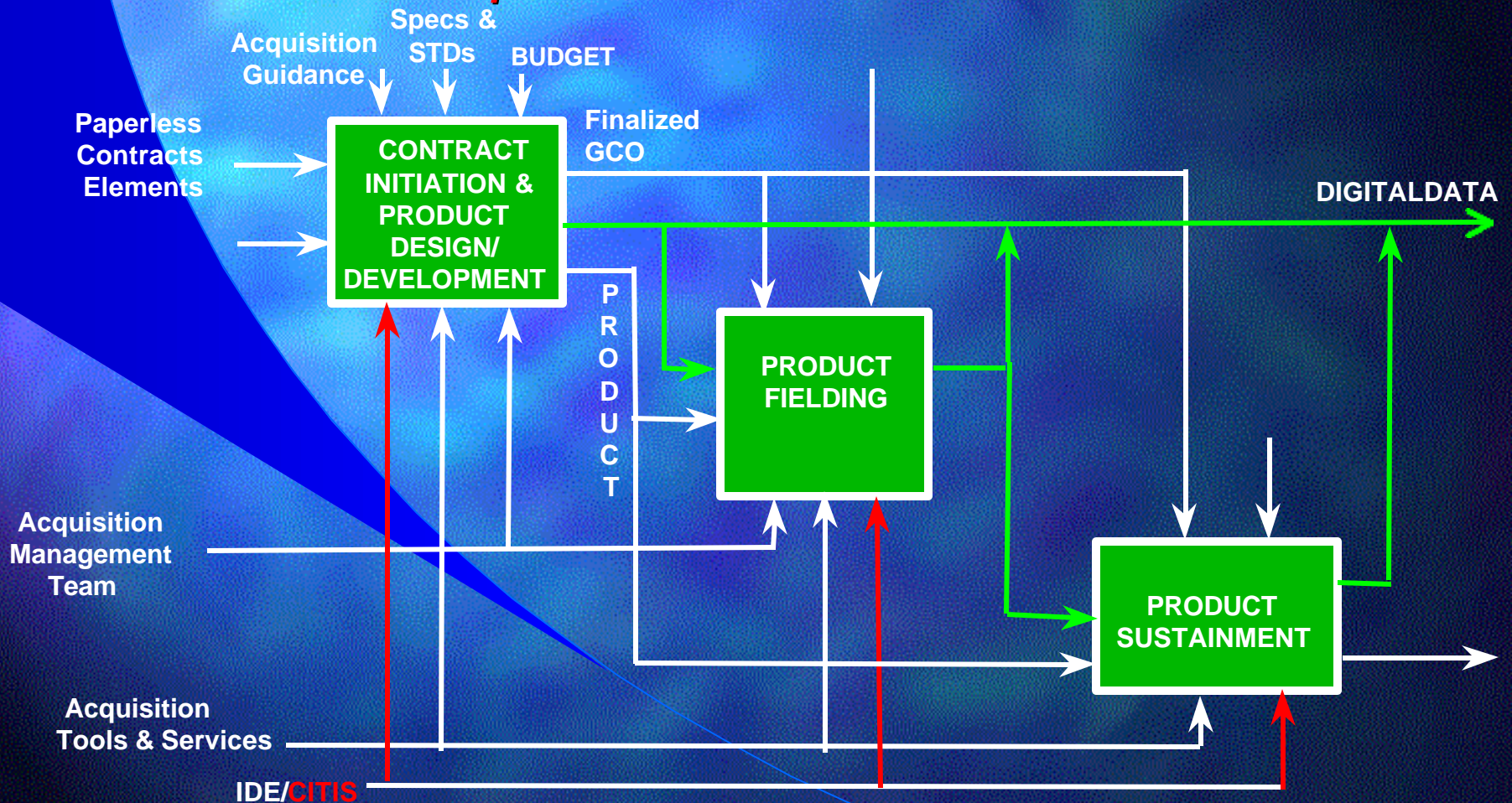
★ *Volatility/Frequency/Quantity of Data*

★ *Single or Multiple Contracts/Vendors*

★ *Availability of Mature IDE and Tools*

PAPERLESS ACQUISITION

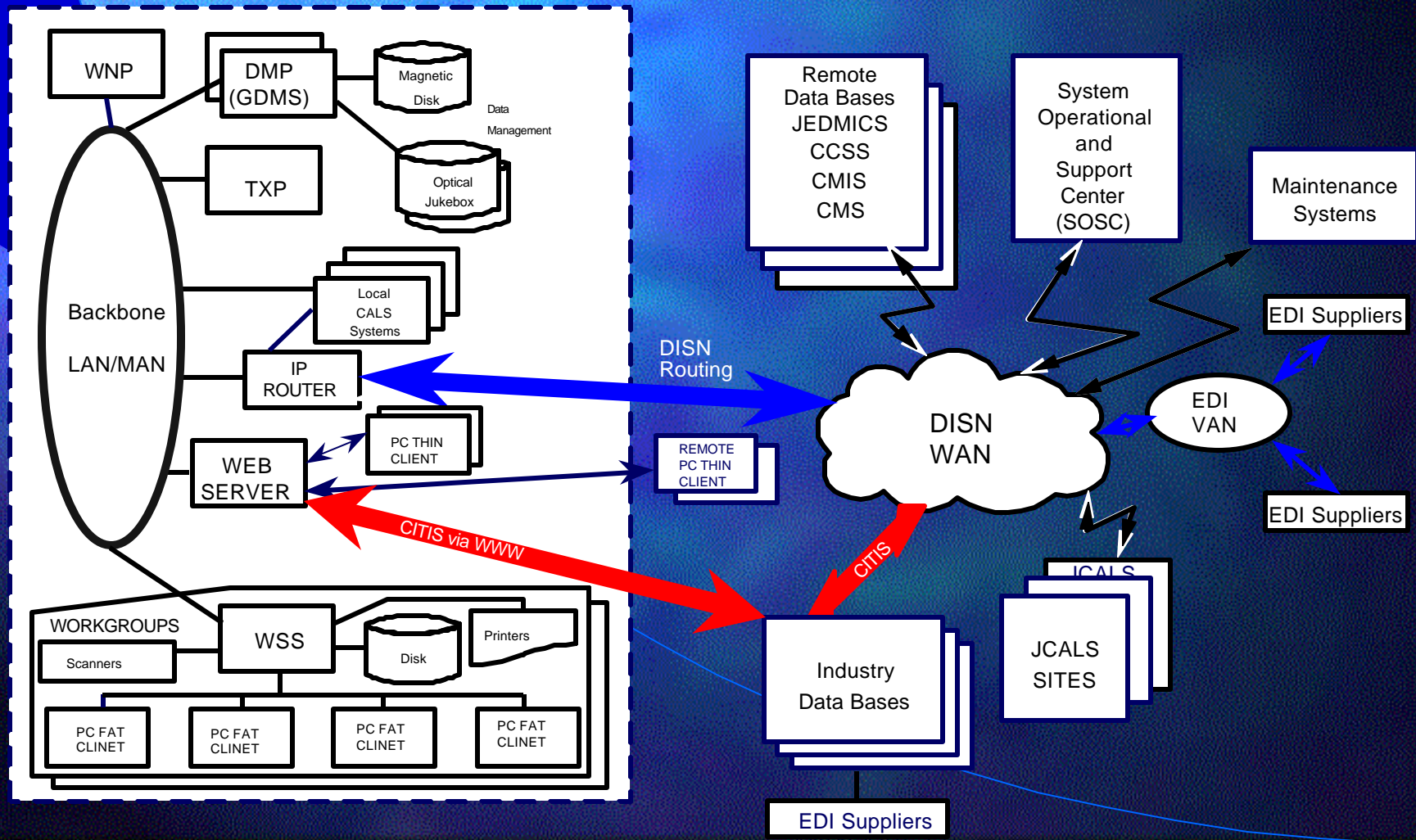
Implementation Process



Each Activity in the Process has a Complementary Government and Contractor Role and Responsibility

INFRASTRUCTURE MODERIZATION INITIATIVES

JCALS Distributed Architecture



CITIS STRATEGIES

TACOM CITIS Initiatives:

★ CMS/M1A1 CITIS

- ★ Servers operating at Detroit Arsenal and CITIS
Servers operating at GDLS and UDLP*
- ★ Workflow among ACALA, ARDEC, & TACOM*

★ Electronic Contract Folderization (ECF)

- ★ Mimicked Packaging & Movement of Contract Info in
Folders Using JCALS Workfolders/Workflow*
- ★ DLA-originated CITIS for Small Purchases*

★ Joint Electronic Folderization (JEF)

- ★ More Generic Version of ECF*
- ★ Expansion to Provisioning and fuller Contracting*

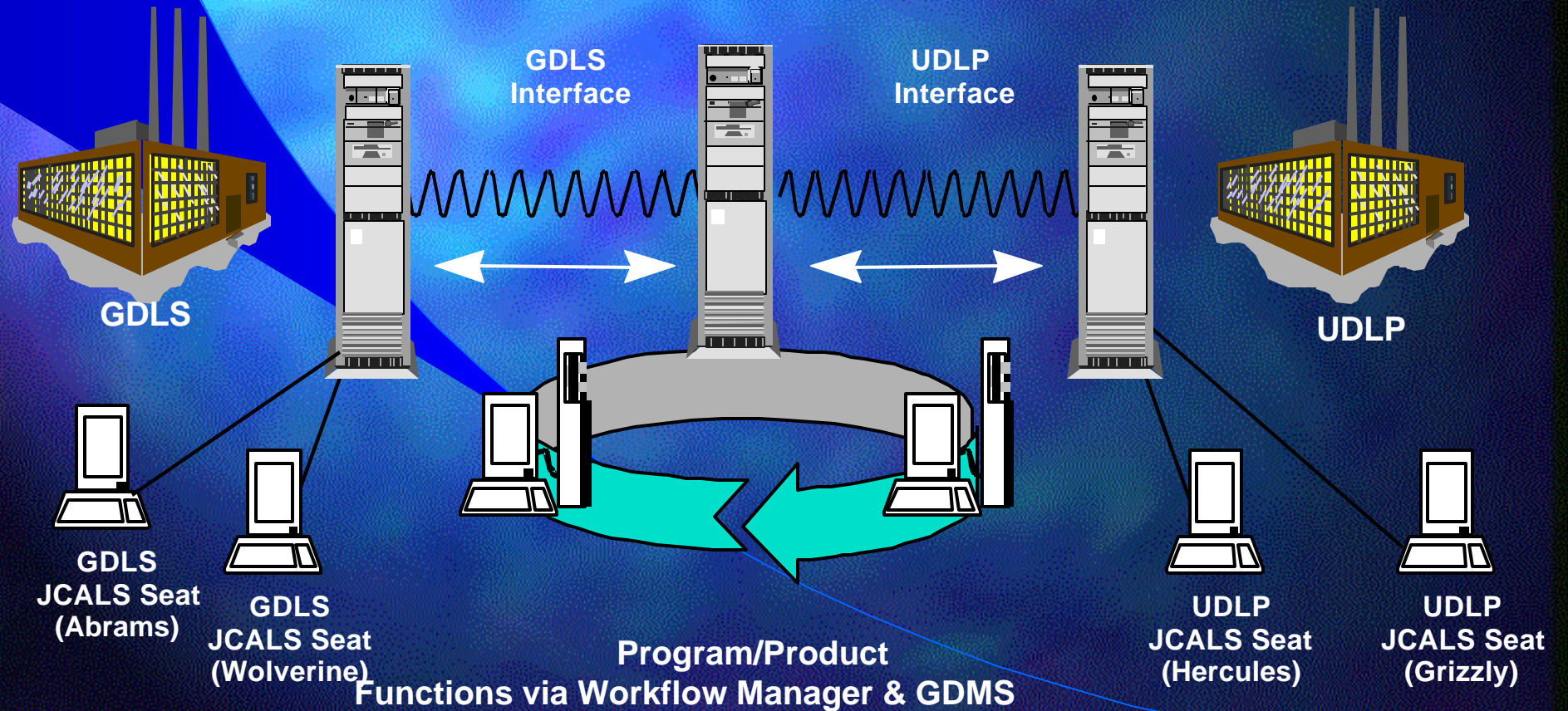
CITIS STRATEGIES

TACOM CITIS

Weapon System Data
Delivered In Place

Government Furnished
Information to Primes

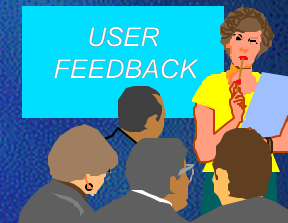
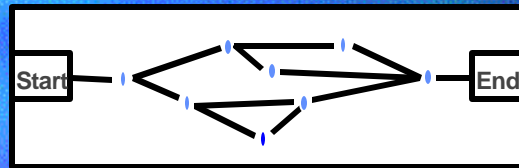
Weapon System Data
Delivered In Place



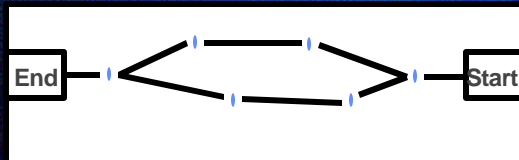
CITIS STRATEGIES

TACOM CITIS

GDMS and Workflow Manager Enables CITIS

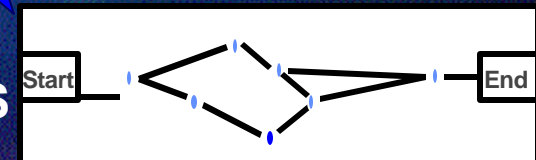


TACOM



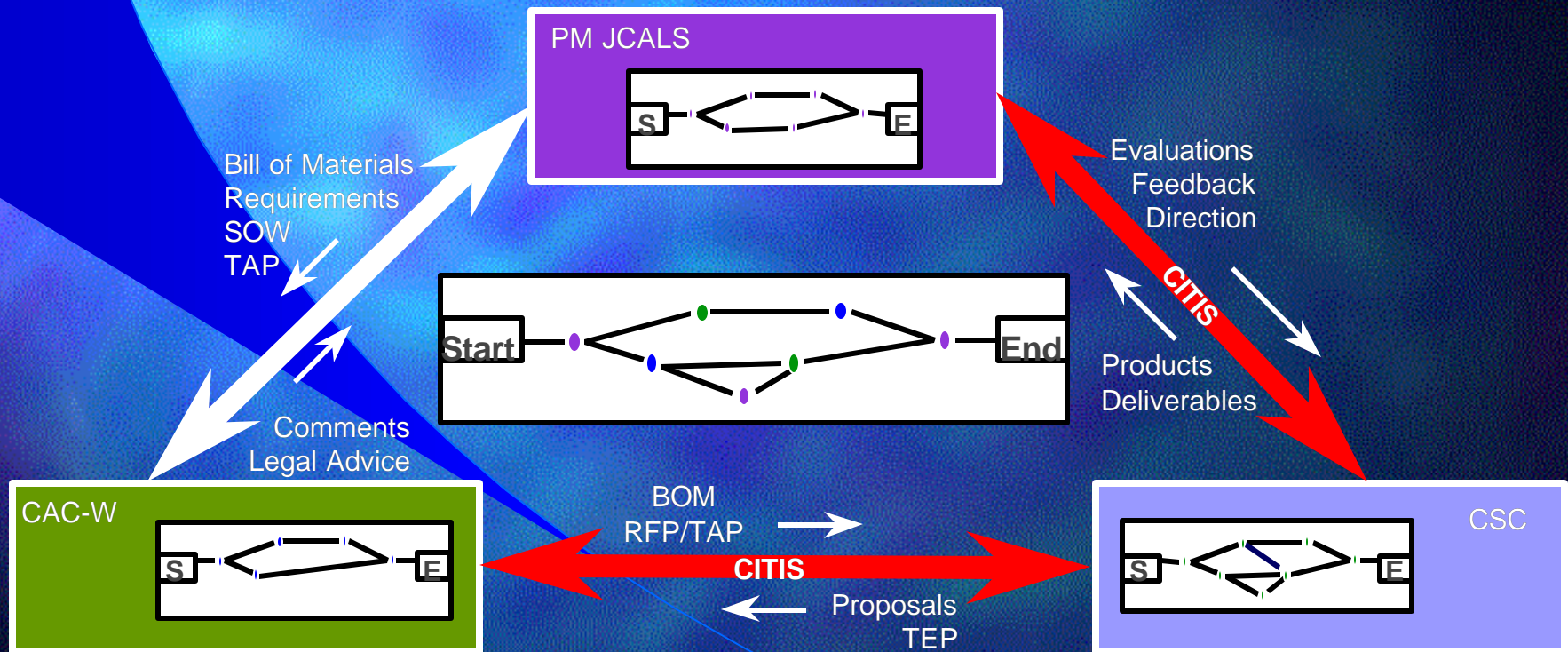
UDLP

GDLS



CITIS STRATEGIES

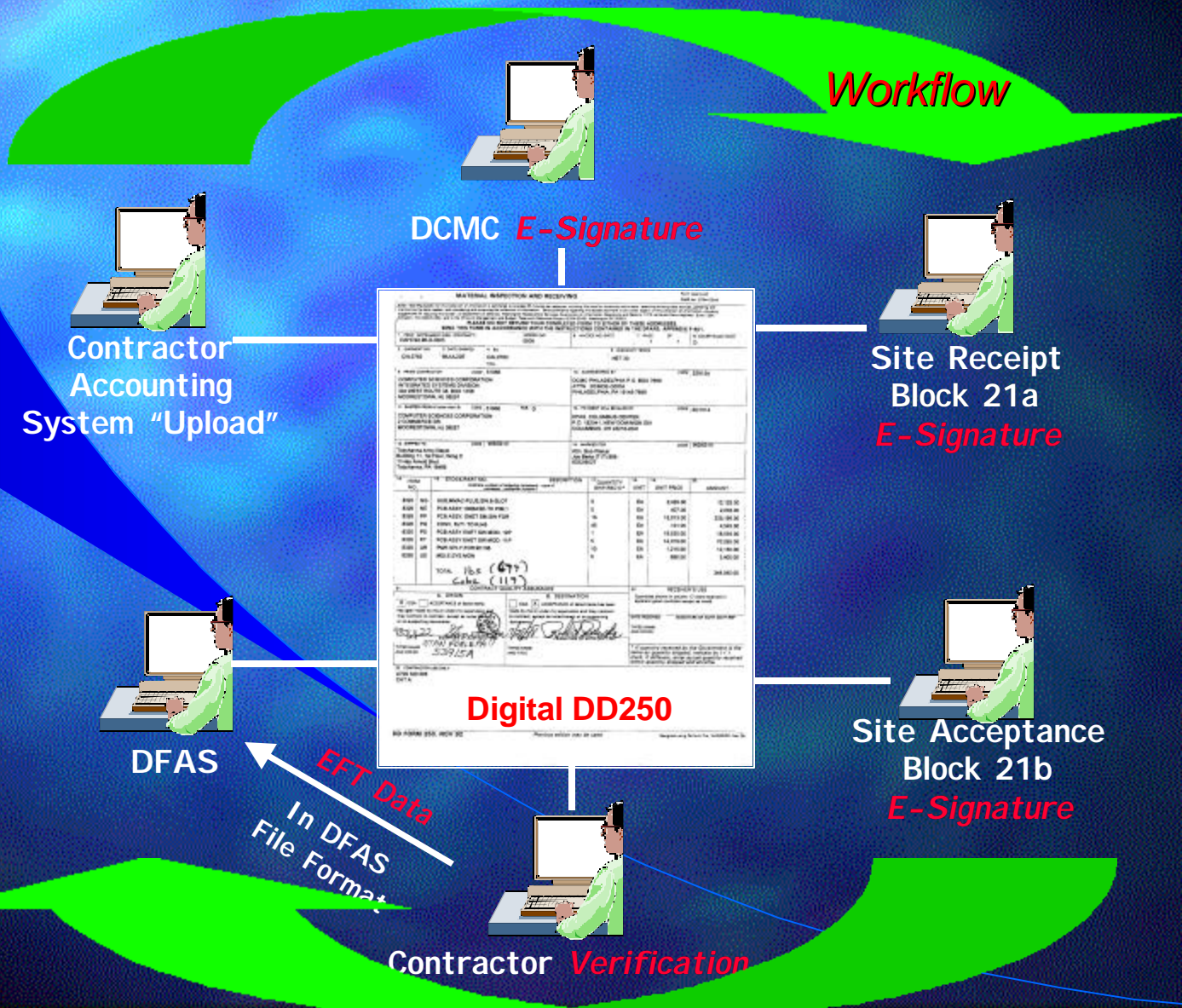
PM JCALS Contracting CITIS using JCALS



PM JCALS Will Employ Its Own System to Implement Contracting Process Among Participants Using Workflow and GDMS

DD250 Process

Workflow & Electronic Signature Enabled



DIGITAL DD250

Form Replication & DB

Untitled Document (FandA/NewForm2.htm*) - Dreamweaver

File Edit View Insert Modify Text Commands Window Help

0 50 100 150 200 250 300 350 400 450 500 550 600 650 700 750 800 850 900 950 1000

form
eD250
Electronic DD Form 250

Public reporting burden for this collection of information is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Report, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0248), Washington DC 20503

1. Proc. Instrument Idn. (Contract)	(Order) No.	6. Invoice No./Date	7. Page	Of	8. Acceptance Point
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Shipment Number	3. Date Shipped	4. B/L	5. Discount Terms		
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>		
9. Prime Contractor	Code	10. Administered By	Code		
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>		
11. Shipped From (If other than 9)	Code	12. Payment Will Be Made By	Code		
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>		
	FOB				
	<input type="text"/>				
13. Shipped To	Code	14. Marked For	Code		
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>		

<body> <div>

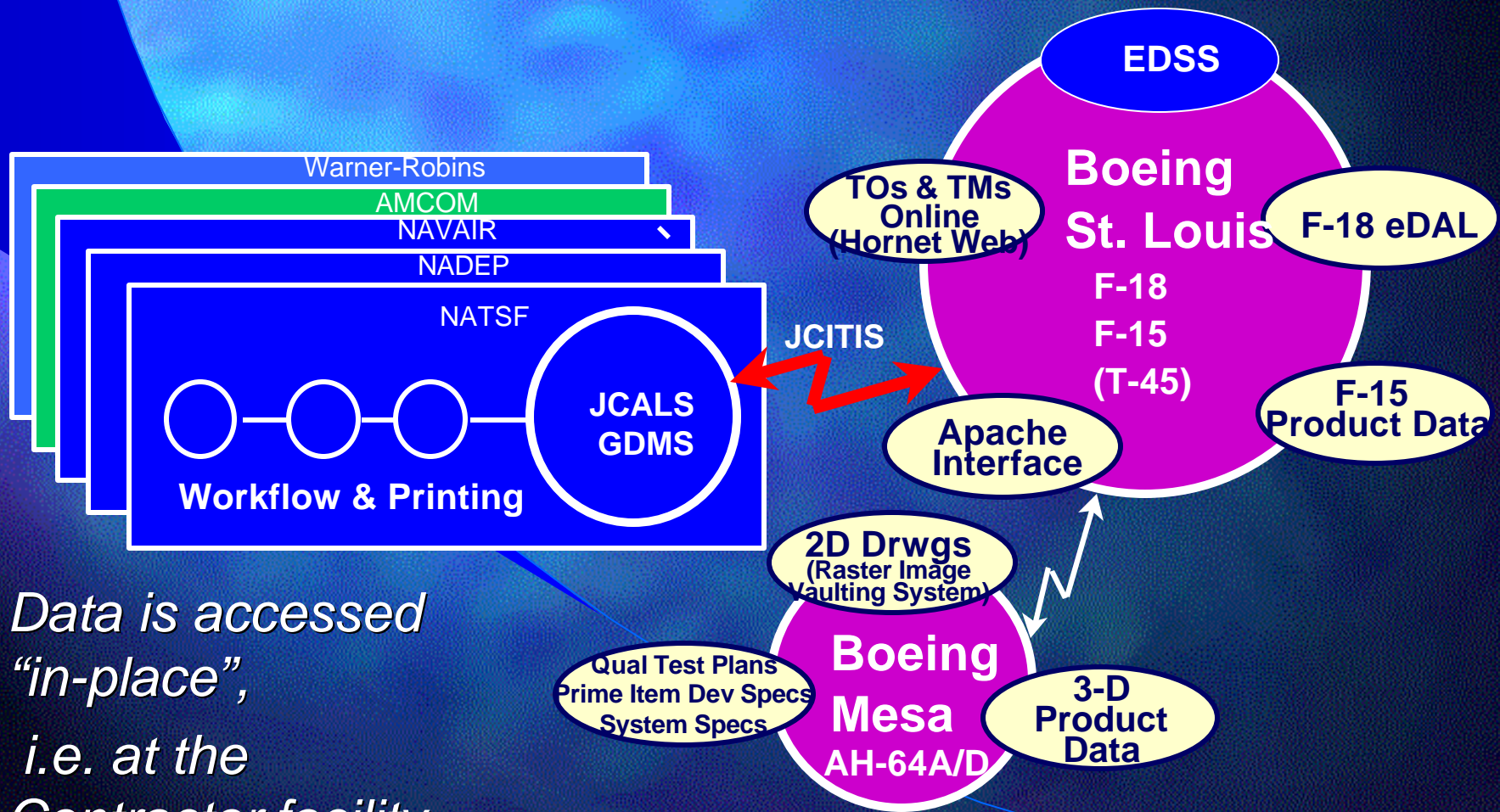
1005 x 661 21K / 6 sec

Start B... J... C... H... J... G... s... F... F... F... F... U... W M..

12:25 PM

CITIS STRATEGIES

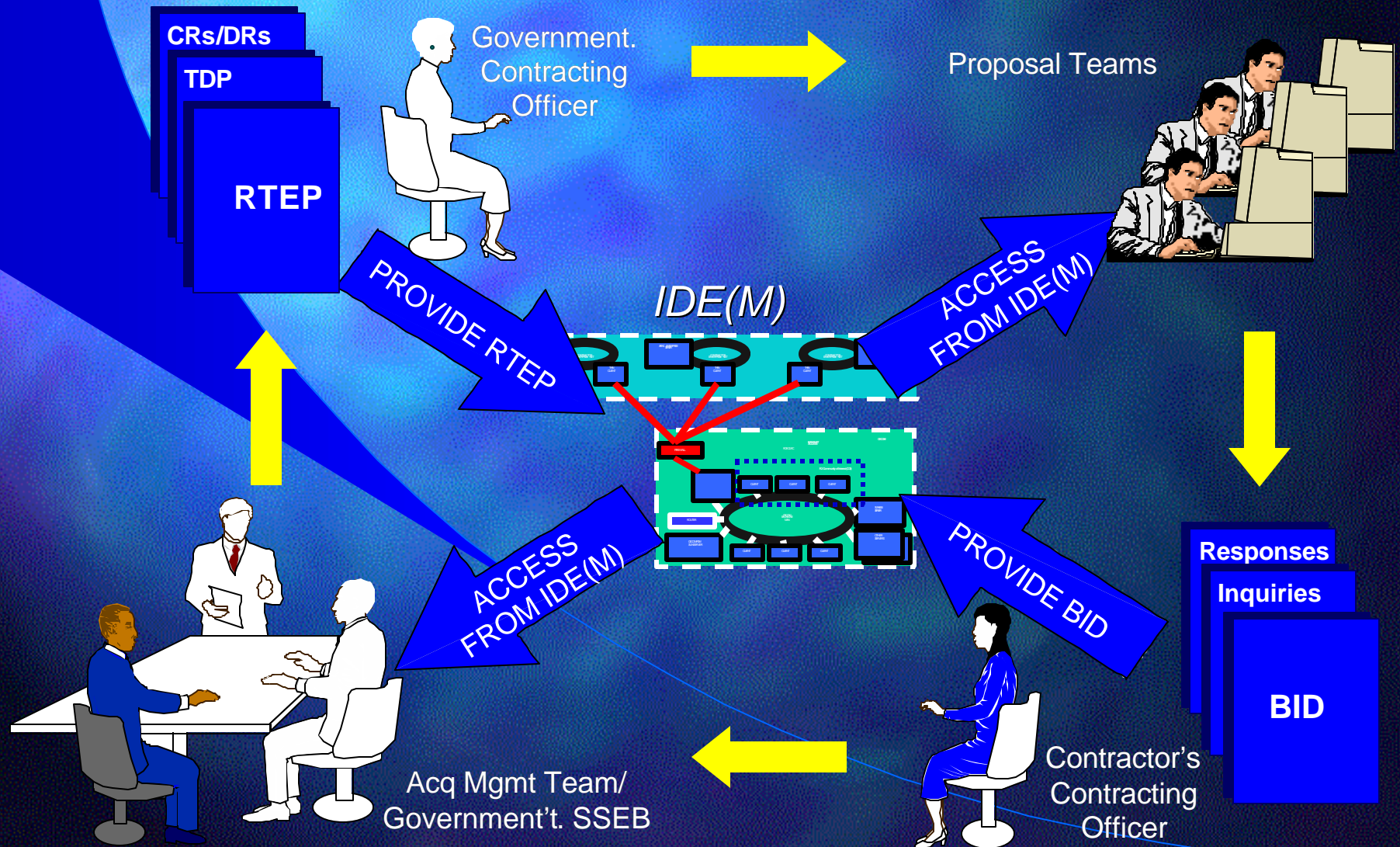
Joint CITIS Project



*Data is accessed
“in-place”,
i.e. at the
Contractor facility*

CITIS STRATEGIES:

R2CSR IDE(M) Concept



R2CSR IDE(M)

Requirements & Issues

★ *Requirements*

- ★ *Omnibus, RTEP-driven Rapid Response Contract*
- ★ *Mandated 7-Day Response Time and Need for Task Status Visibility for Ongoing Spares Contract*
- ★ *Need for Secure, Segregated CITIS Transactions*

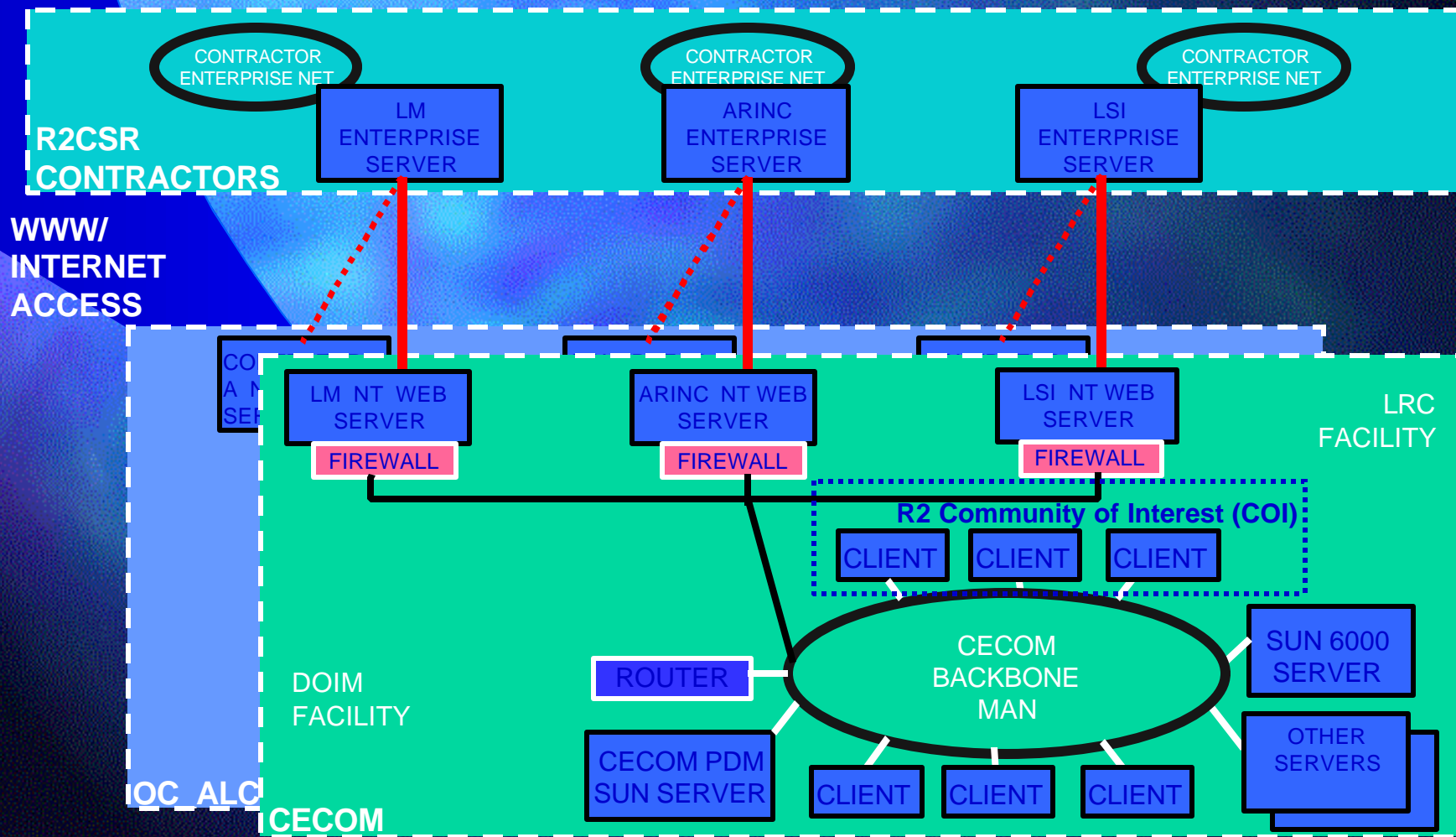
★ *Issues:*

- ★ *3 Teams [20+ Subcontractors] With Different Contractor Enterprise Solutions*
- ★ *2 Government Agencies, Each With Its Own Responsibilities & IDE Solutions/preferences*
- ★ *Unwillingness And/or Economic Inability to Create a Single Homogenous System*
- ★ *BOP Solution not Flexible Enough*

CITIS STRATEGIES

R2CSD IDE(M)

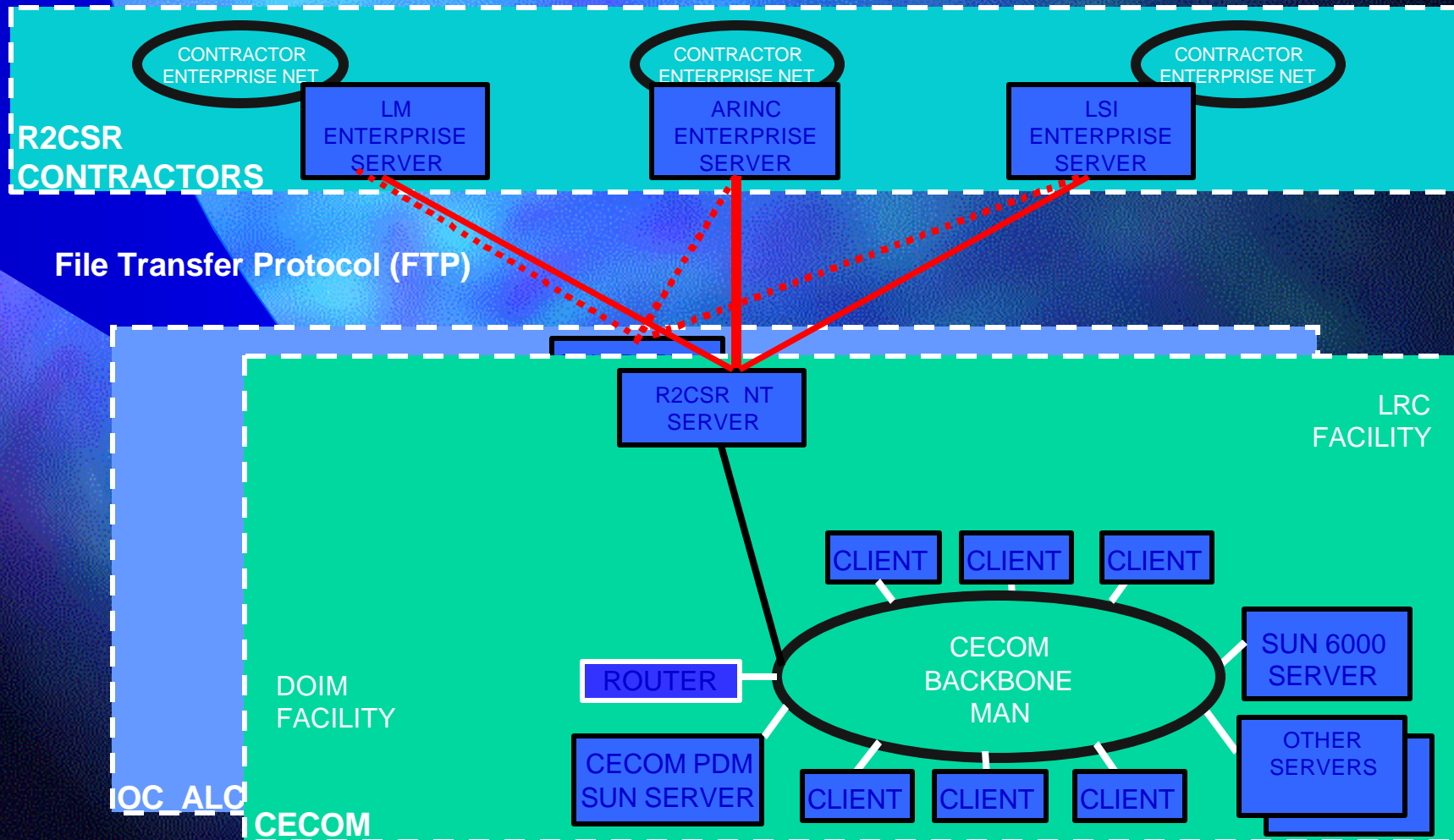
R2TOP 3-Server Alternative



CITIS STRATEGIES

R2CSD IDE(M)

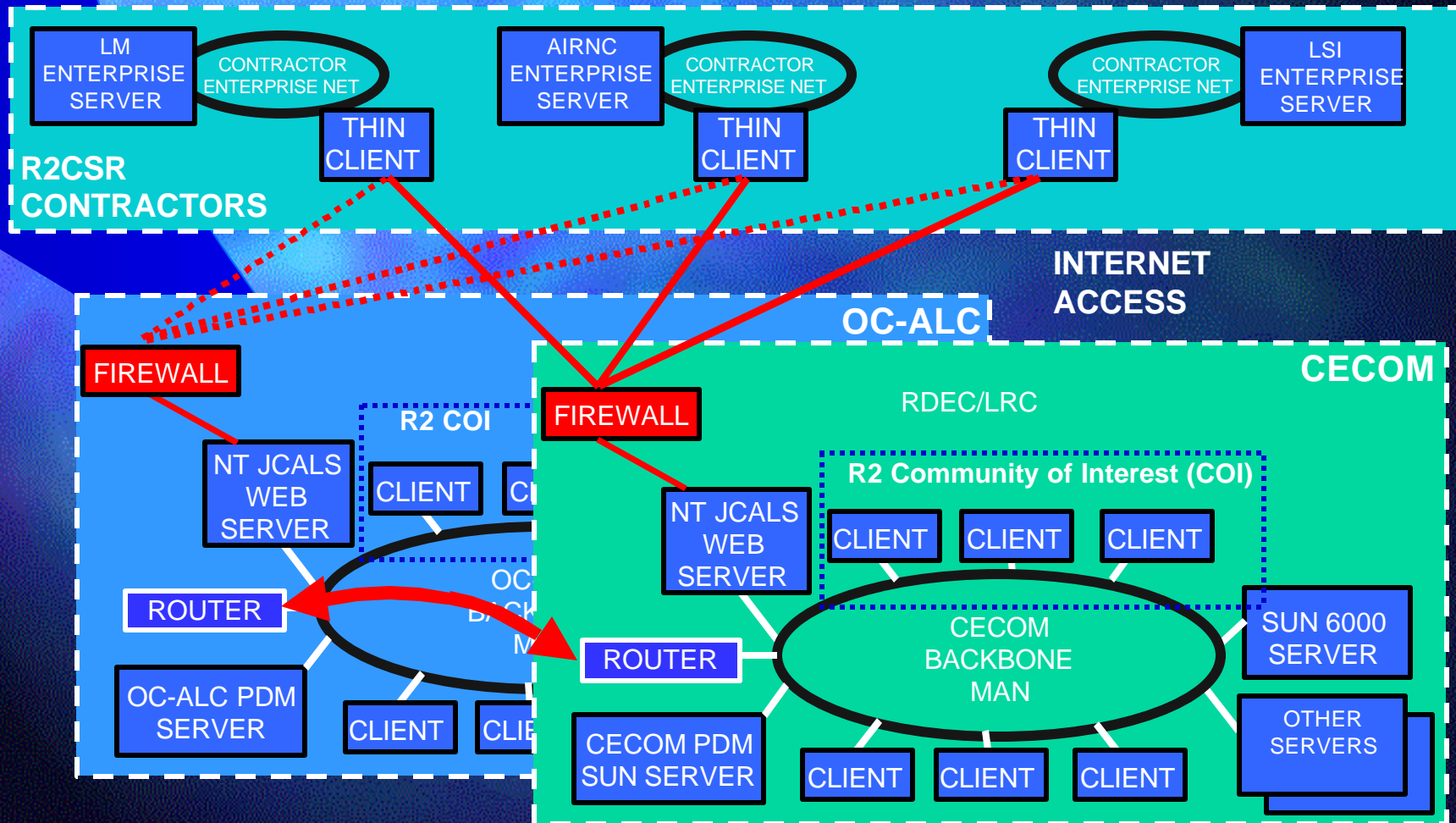
R2TOP 1-Server Alternative



CITIS STRATEGIES

R2CSR IDE(M)

Proposed JCALS Thin Client Workflow Alternative



R2CSR IDE(M)

Solution & Lessons Learned

★ *Requirements*

- ★ *Omnibus, TAP-driven Rapid Response Contract*
- ★ *Mandated Schedule Response Time and Need for Task Status Visibility for Spares Contract*
- ★ *Need for Secure, Segregated CITIS Transactions*

★ *Issues:*

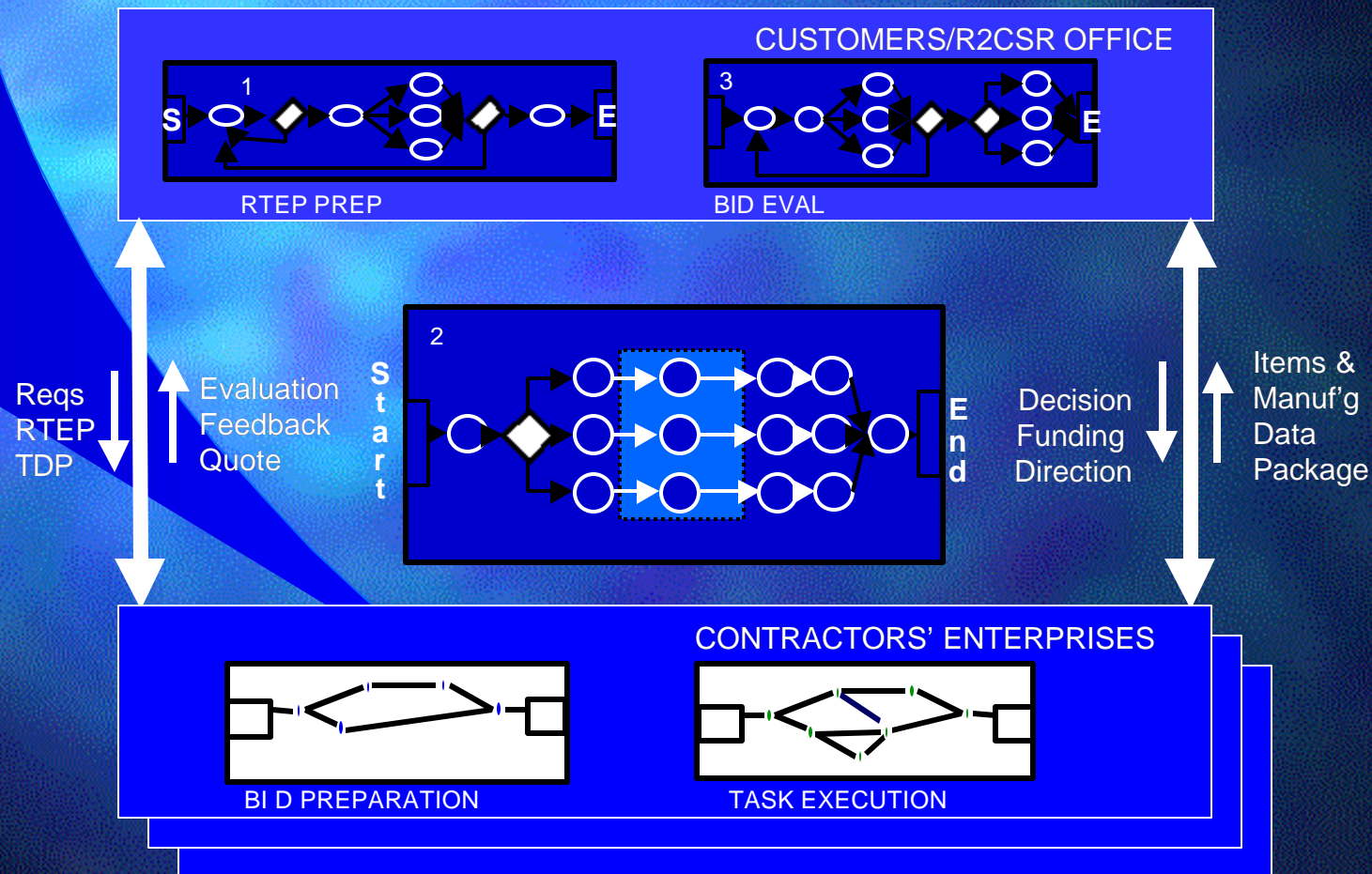
- ★ *3 Teams [20+ Subcontractors] With Different Contractor Enterprise Solutions*
- ★ *2 Government Agencies, Each With Its Own Responsibilities & IDE Solutions/preferences*
- ★ *Unwillingness And/or Economic Inability to Create a Single Homogenous System*
- ★ *BOP Solution not Flexible*

★ *Proposed Solution:*

- ★ *Use JCALS Workflow Manager, Workfolders, and GDMS software capabilities to provide:*
 - ★ *Secure, Segregated Transactions*
 - ★ *RTAP/RTEP and deliverable Transmittal and Response Time Logging*
 - ★ *Task Status Visibility and Metrics*
 - ★ *Repeatability of Process Thru Use of Workflow Templates*
- ★ *Use of JCALS Infrastructure, Featuring the JCALS Web Server, at CECOM RDEC*
 - ★ *Thin Client Access to Web Server Hosting Workflow/Workfolder*
 - ★ *Thin Client Allowed Other Sites to Remain With Own Solutions While Providing an "Air-gapped" Bridge to RDEC Acquisition Manager*

R2CSR IDE(M) PILOT

Workflow Manager-Enabled R2 Process



CECOM Will Employ JCALS To Implement R2CSR
Process Among Participants Using Workflow And GDMS

LESSONS LEARNED

- ★ *Complex, Multi-vendor Contract for Several Products Over the Full Life Cycle Is Analogous to a Unified CITIS Solution for the Whole Army*
- ★ *CONOPS for CIDS, like a GCO, must :*
 - ★ *Address Each Phase of the Full Life Cycle*
 - ★ *Provide Flexible CITIS “Access” (Deliver in Place) Vs “Download” (Deliver Indeed) Model to Suit the Acquisition Managers’ CM and Budget Needs As Well As Phase of Life Cycle*
 - ★ *Acknowledge That the Contractors’ Corporate and Teaming Enterprise Solutions Are Perhaps More Varied Than the Army’s; the cost and management of individual solutions are escalating*
 - ★ *Use of a Pervasive, Common Army Infrastructure and Flexible Tools to Minimize Costs and to Leverage Existing Solutions*
 - ★ *Address/Reconcile Communications Bandwidth Issues (of DISN) to Minimize Manifold Individual Comm Costs*
 - ★ *Address the volatile and ever-increasing data format issues*

SUMMARY

- ★ *Unified CITIS Solution for the Whole Army Is Analogous to a Complex, Multi-vendor Contract for Several Products Over the Full Life Cycle Except It's Bigger and the Army Can Reap Greater Savings and Benefits*
- ★ *Paperless Acquisition is a Team Effort*
 - ★ *Acquisition, Logistics, and R&D Centers; IT/IDE Support, Business, KO, and PM/PEO*
 - ★ *Requires a Team Solution*
- ★ *Army CITIS CONOPS Must Implement a Flexible Solution that Embraces all Phases of the Product Life Cycle*
- ★ *Tools, Services, and references are available to facilitate the effort*
- ★ *Existing Infrastructure/IDE Can Support CITIS and Paperless Acquisition*

INTERNET ADDRESSES

dlugosze@mail1.monmouth.army.mil

dlugosz-src@srcorp.com

edwarddlugosz@monmouth.com

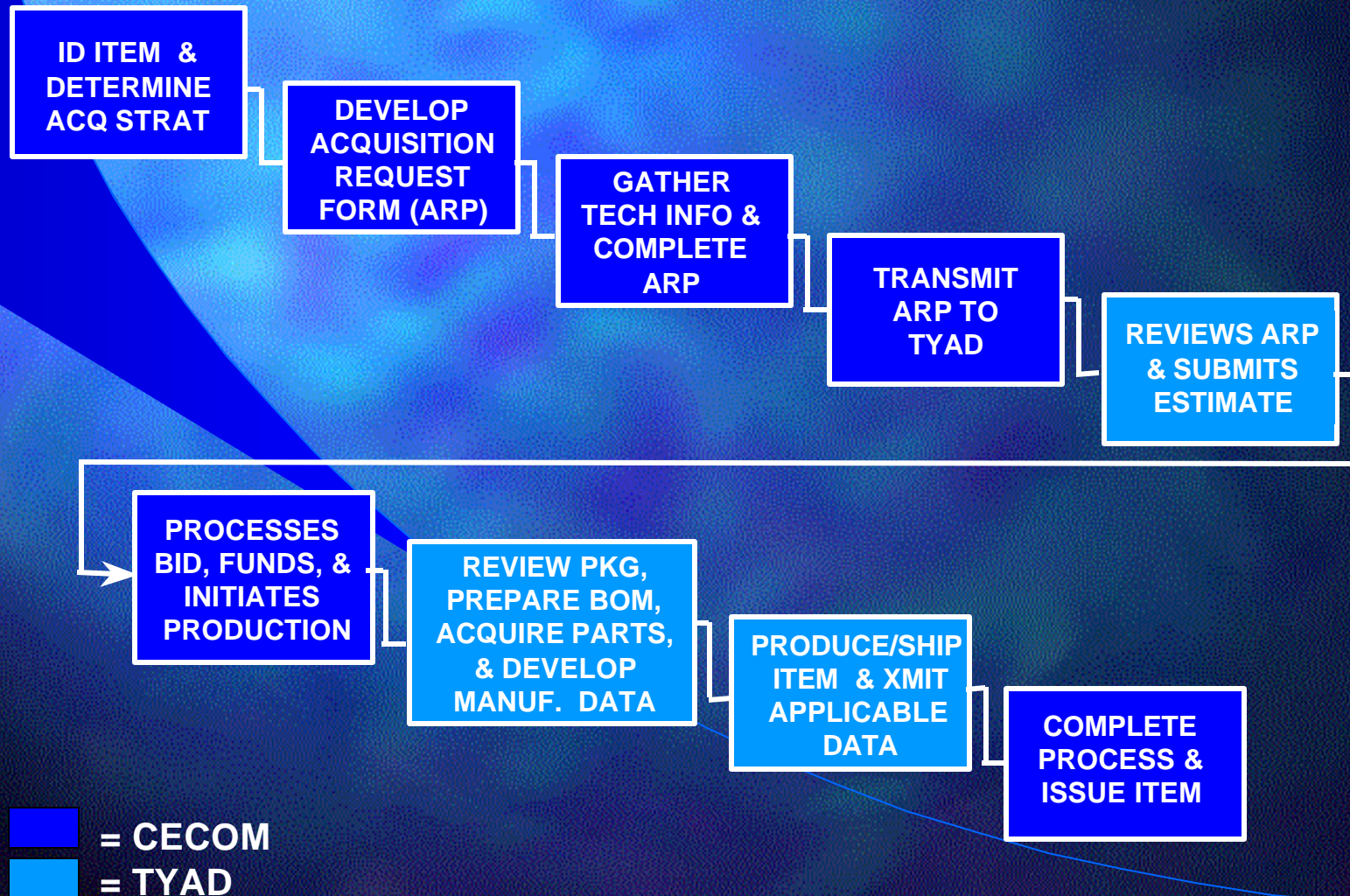
PAPERLESS ACQUISITION

Selected References URLs:

- ★ *Defense Acquisition Deskbook*
<http://www.deskbook.osd.mil>
- ★ *Joint Services CALS Reference Toolkit*
 - ★ *GCO Generator*
 - ★ *Contracting for CALS Tutorial (DSMC)*
<http://www.acq.osd.mil/log/lro/toolkit/>
- ★ *CECOM Acquisition Center*
 - ★ *<http://www.monmouth.army.mil/cecom/ac/ac.html>*
- ★ *CECOM Business Opportunity Page*
 - ★ *<Http://www.monmouth.army.mil/cecom/ac/ac.html>*
 - ★ *<http://134.80.11.9/>*
- ★ *Electronic Commerce Resource Center*
[http:// www.ecrc.ctc.com](http://www.ecrc.ctc.com)

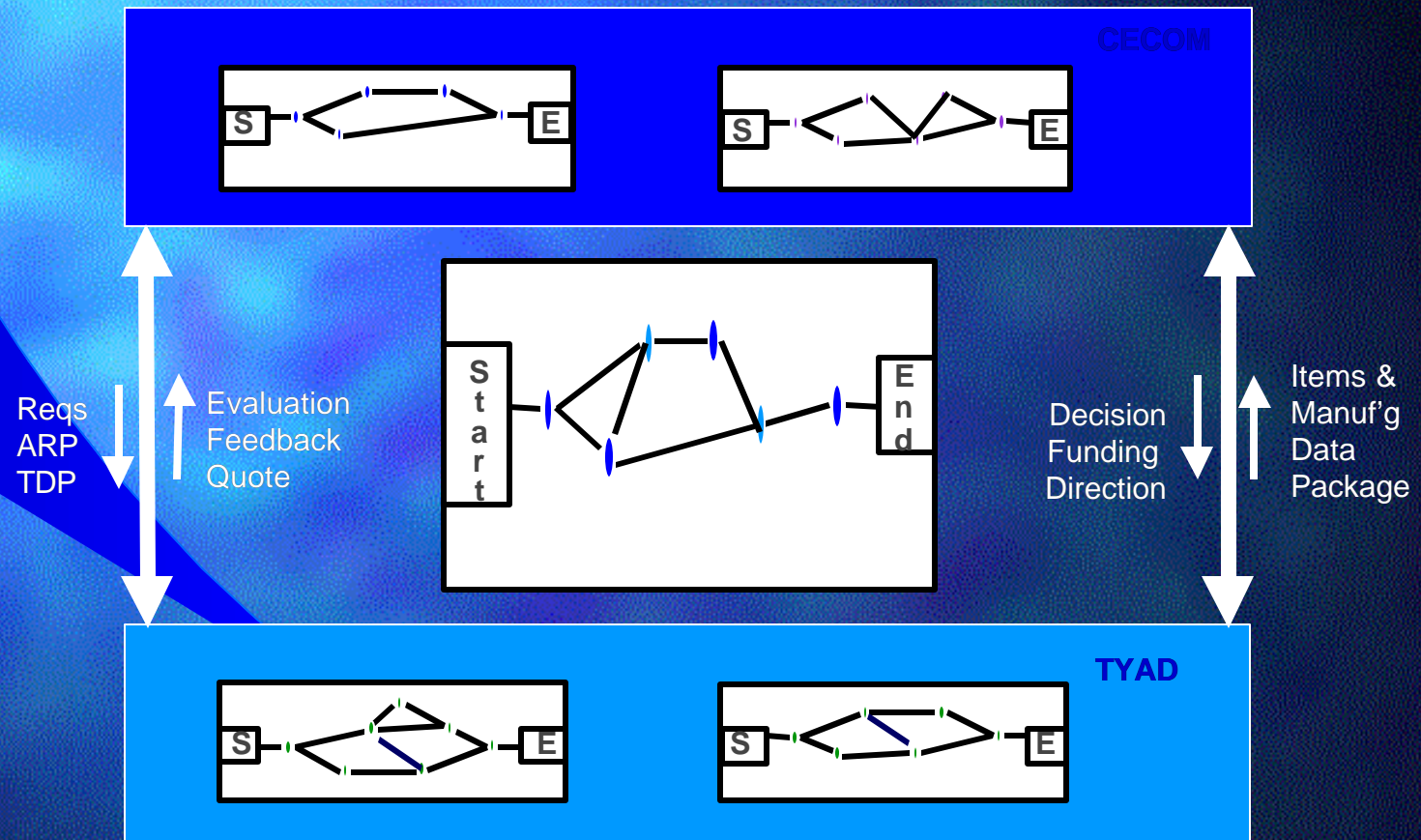
CECOM IDE/FCIM PILOT

CECOM-TYAD FCIM Process



CECOM IDE/FCIM

Workflow Manager-Enabled FCIM Process



CECOM And TYAD Will Employ JCALS To Implement FCIM Process
Among Participants Using Workflow And GDMS

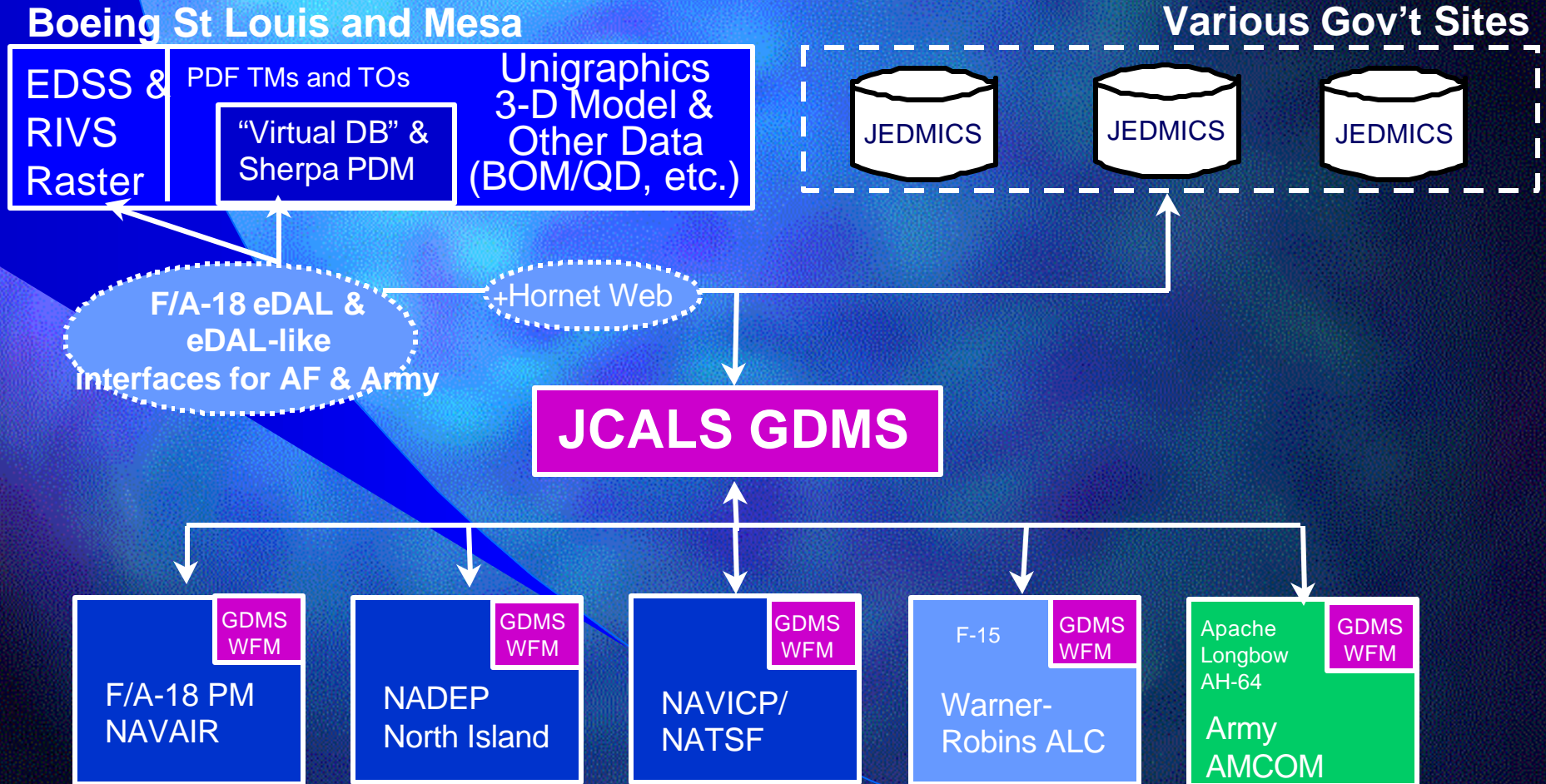
CITIS STRATEGIES

JCITIS Objectives

- ★ *Assess Capability to Improve Business Processes*
 - *Reduced Cycle Time Using GDMS & Workflow Management Tools*
- ★ *Evaluate Access to Digital Technical Data*
 - *Ease of Access to Various Types of Data , Such As 3-D CAD*
- ★ *Determine Requirements for Implementation of Production System*
 - *Assess Impact to Current Information Infrastructure (WANs, LANs, Servers/Clients)*
- ★ *Assess Impact to Current CITIS Arrangements*
 - *Changes in Costs and Benefits*
 - *Contractual Modifications*

CITIS

Joint CITIS Project



CITIS

★ AF GPS

- ★ *Implements an automated ECP process that connects 4 AF activities, 2 contractors (300 users)*

★ NAVY JCALS

- ★ *30+ sites connected to 12 Navy and contractor engineering drawing and technical data repositories.*

★ DLA

- ★ *Electronic Contract Folderization automates the delivery and routing of Procurement requests and subsequent contract actions on small (less than \$25K)*
- ★ *Contract data will be available on-line to DFAS to support the bill-paying process and will help to reduce unmatched disbursements*